BRUHATH BENGALORE MAHANAGARA PALIKE DASARAHALLI ZONE

work: Improvemnets To Roads At 1st,2nd,3rd,4th Cross,1st Main Road Kalyana Nagara, 15th C Cross Prashanth Nagara And Surrounding Area In Ward No 13 Shettyhalli Sub-Division

Est .Cost Rs 45.00 Lakhs

	Unit	No	Dimension L	Dimension B	Dimension D	Quantity	Rate in Rs.	Amount in Rs.
RB 300-3. Earthwork excavation by manual means for roads, drains & similar works in ordinary soil invoiving , vated surface leveled & sides neatly dressed , the disposed earth to be levelled neatly after breaking of clods complete per specification MORTH/ Chapter 3. **(Page No. 142/ Item No. 19.1/ PWD SR 2018-19)**								
r RCC Drain								
h Cross,Kalyana Nagara		2	64.00	1.10	1.00	140.80		
esilt								
Kalyana Nagara								
From 7th cross to 10th cross		1	28.00	0.60	0.75	12.60		
		1	32.00	0.60	0.75	14.40		
For CC Road								
4th C Cross		1	45.00	6.40	0.30	86.40		
For Asphalt Road								
Kalyan Nagara								
3rd cross, 1st Main Road to 2nd Main Road		2	85.00	1.20	0.25	51.00		
7th Cross Gurujji Road from pipe line to 3rd Crs		2	206.00	1.20	0.25	123.60		
Prashanth Nagara								
15th C cross		2	135.00	1.20	0.25	81.00		
	Cum					**509.80**	**137.80**	**70250.44**
Basic Rate	130.00							
Area Weightage 6%	7.80							
Grand Total	**137.80**							
2 KSRRB M2100-10. Providing and laying Plain cement concrete of mix 1:3:6 with OPC @ 220kgs, with crushed 40mm and down size graded granite metal coarse aggregates @0.89cum and fine aggregates @ 0.46cum, in foundation mechanically mixed, placed in foundation and compacted by vibration including curing for 14 days including cost of all materials, labour, HOM curing, form works, scaffolding and centering complete as per specifications. **(P.No-222,I No-27.18 pwd 2018-19)**								
For RCC Drain								
7th Cross,Kalyana Nagara		2	64.00	1.10	0.15	21.12		
For CC Road								
4th C Cross		1	45.00	6.40	0.15	43.20		
	Cum					**64.32**	**5509.33**	**354359.89**
Basic Rate	5115.00							
Deduct Cement cost as per SR -18-19 Page No.V Sl.No.123	-1079.39	Note:- (220*490.63/100)=1079.39						
Add Cement cost as per Issue rate	1161.86	Note:- (220*264.06/50)=1161.86						
Sub Total	**5197.48**							
Area Weightage 6%	311.85							
Grand Total	**5509.33**							
3 Providing and laying plain/reinforced cement concrete for side drains **using M20 nominal mix** concrete with OPC at 300 kgs. with 20mm and down size granite metal coarse aggregates at 0.69 cum and fine aggregates at 0.43 cum machine mixed, well compacted for walls and bottom including centering, shuttering, cost of materials, HOM of machinery, curing etc., complete excluding cost of steel as per MORTH specification No. 1500, 1700, 2200. including cost of materials, labour, HOM complete as per specificationsdo- Wall & bottom thickness 15cm **(I No-37.59.2,P No-271 pwd 2018-19)**								
For RCC Drain								
For Bottom Raft								
7th Cross,Kalyana Nagara		2	64.00	0.90	0.15	17.28		
For Wall								
7th Cross,Kalyana Nagara		4	64.00	0.15	0.75	28.80		
Deck Slab								
Kalyana Nagara								
From 7th cross to 10th cross		1	28.00	1.20	0.20	6.72		
		1	54.00	1.50	0.20	16.20		
Conrete For Bed Protection								
From 7th cross to 10th cross		1	28.00	0.75	0.10	2.10		
		1	54.00	0.75	0.10	4.05		
	Cum					**75.15**	**7189.42**	**540284.78**
Basic Rate	6670.00							
Deduct Cement cost as per SR -18-19 Page No.V Sl.No.123	-1471.89	Note:- (300*490.63/100)=1471.89						
Add Cement cost as per Issue rate	1584.36	Note:- (300*264.06/50)=1584.36						

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	Sub Total	**6782.47**							
	Area Weightage 6%	406.95							
	Grand Total	**7189.42**							
	9.2 : Providing T.M.T steel reinforcement for R.C.C workincluding straightening, cutting, bending, hooking, placing on,lapping and / or welding wherever required, tying with binding wire andanchoring to the adjoining members er necessary complete asper design (laps, hooks and wastage shall not be measured and paid)cost of materials, / HOM of machinery complete as perspecifications.Specification No. KBS 4.6.3- TMT Bars Fe 500 **(I No-28.8.2,P 9 PWD SR 2018-19)**								
	der 65kg/Cum for drain		1	75.15	65.00		4884.75		
		Tonne					**4.88**	**72326.98**	**353299.22**
	Basic Rate	68233.00							
	Area Weightage 6%	4093.98							
	Grand Total	**72326.98**							
	oviding and fixing Precast RCC cover slabs of 100 mm thick for drain in cement concrete 1:1.5:3 using graded granite ly 20mm and down size with steel reinforcement and pointing for joints 1:3 cement mortor including form work, lift harges,curing and concrtee finished surface on both sides etc,and complete as per the directions of Enginner in harges.(Data Rate)								
	For RCC Drain								
	7th Cross,Kalyana Nagara		2	64.00	0.90		115.20		
			1	32.00	0.90		28.80		
		Sqm					**144.00**	**1615.00**	**232560.00**
	Data Rate	**1615.00**							
	Providing and constructing granite / trap / basalt size stone masonry in foundation with cement mortar 1:6 stone hammerd dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications. KBS 5.1.13 **(P.No-255,I No-27.34.8.2 PWD 2018-19)**								
	For Flagging Course								
	Kalyana Nagara								
	From 7th cross to 10th cross		2	82.00	0.45	0.40	29.52		
		Cum					**29.52**	**4891.63**	**144400.91**
	Basic Rate	4596.00							
	Deduct Cement cost as per SR -18-19 Page No.V Sl.No.123	-245.32	Note:- -(0.2*1*1=0.2 Cum/Sqm) (0.2*250*490.63/100)=245.32						
	Add Cement cost as per Issue rate	264.06	Note:- (0.2*250*264.06/50)=264.06						
	Sub Total	**4614.75**							
	Area Weightage 6%	276.88							
	Grand Total	**4891.63**							
7	Providing ruled pointing to coursed stone masonry with cement mortar, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. – do – cement mortar 1:3 (P.No-255,I No-27.34.13.1 PWD 2018-19)								
	For Flagging Course								
	Kalyana Nagara								
	From 7th cross to 10th cross		2	82.00		0.40	65.60		
							65.60	**154.57**	**10140.02**
	Basic Rate	142.00							
	Deduct Cement cost as per SR -18-19 Page No.V Sl.No.123	-50.04	Note:- (0.02*1*1=0.02Cum/Sqm) (0.02*510*490.63/100)=50.04						
	Add Cement cost as per Issue rate	53.87	Note:- (0.02*510*264.06/50)=53.87						
	Sub Total	**145.82**							
	Area Weightage 6%	8.75							
	Grand Total	**154.57**							
8	KSRRB 300-49. Scarifying bituminous course 50mm to 75mm thick along with premix carpet / surface dressing by manual means without disturbing the base and stacking of the debris materials including cost of all labour charges complete as per specifications. MORTH / Chapter 3 **(Page No. 146/ Item No.19.55/ PWD SR 2018-19)**								
	For Asphalt Road								
	Kalyan Nagara								
	3rd cross, 1st Main Road to 2nd Main Road		2	85.00	1.20		204.00		
	7th Cross Gurujji Road from pipe line to 3rd Crs		2	206.00	1.20		494.40		
	Prashanth Nagara								
	15th C cross		2	135.00	1.20		324.00		
		Sqm					**1022.40**	**95.40**	**97536.96**
	Basic Rate	90.00							
	Area Weightage 6%	5.40							
	Grand Total	**95.40**							
9	KSRRB M200-24. Dismantling of cement concrete pavement by mechanical means using pneumatic tools, breaking to pieces not exceeding 0.02 cum in volume and stock piling at designated locations and disposal of dismantled materials stacking serviceable and unserviceable materials seperately complete as per specifications. MORTH Specification No. 202 **(Page No-140 Item no - 18.47 of KPWD SR 2018-19)**								
	For CC Road								

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ss		1	45.00	6.40	0.15	43.20		
	Cum					43.20	952.94	41167.01
Basic Rate	899.00							
Area Weightage 6%	53.94							
Grand Total	952.94							

B 300-Compaction KSRRB 300-58. Compaction of original ground with maximum of 6 passes of 8 to 10 tonnes r roller including filling in depression occuring during rolling including cost of all labour, HOM of machinery complete as pecifications. MORTH / Chapter 3 **(Page No-147 Item no - 19.64 of KPWD SR 2018-19)**

r CC Road		1	45.00	6.40		288.00		
h C Cross								
or Asphalt Road								
Kalyan Nagara		2	85.00	1.20		204.00		
3rd cross 1st Main Road to 2nd Main Road		2	206.00	1.20		494.40		
7th Cross Gurujji Road from pipe line to 3rd Crs								
Prashanth Nagara		2	135.00	1.20		324.00		
15th C cross						1310.40	6.36	8334.14
	Sqm							
Basic Rate	6.00							
Area Weightage 6%	0.36							
Grand Total	6.36							

11 KSRRB M400-17. Providing, laying, spreading and compacting cushed stone aggregates of granite / trap I basalt to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed materials by tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve thedesired density complete as per specifications. MORTH Specification No. 406 **(Page No-158 Item no - 20.18 of KPWD SR 2018-19).**

For CC Road		1	45.00	6.40	0.15	43.20		
4th C Cross								
For Asphalt Road								
Kalyan Nagara		2	85.00	1.20	0.25	51.00		
3rd cross 1st Main Road to 2nd Main Road		2	206.00	1.20	0.25	123.60		
7th Cross Gurujji Road from pipe line to 3rd Crs								
Prashanth Nagara		2	135.00	1.20	0.25	81.00		
15th C cross						298.80	2001.28	597982.46
	Cum							
Basic Rate	1888.00							
Area Weightage 6%	113.28							
Grand Total	2001.28							

12 Cement concrete pavement.Construction of un-reinforced plain cement concrete pavement, thickness as per design, over a prepared sub base with OPC cement or any other type as per clause 1051.2.2 design mix M20/M30 , with 25mm and down size graded granite metal coarse aggregates and fine aggregtes , with superplastisiser @3lts confirming to IS9103-1999 Reaffirmed-2008 , mixed in a concrete mixer of not less than 0.6 cum capacity and appropriate weigh batcher as per approved mix design, laid in approved fixed side form work (steel channel, laying and fixing of 125 micron thick polythene film, wedges, steel plates including levelling the form work as per drawing). Spreading the concrete with shovels, rackers compacted using needle, screed and plate vibrator and finished in a continuous operation including provision of contraction, expansion, construction and longitudinal joints including groove cutting charges, joint filler, separation membrane, selant primer, joint sealant, admixtures as approved, curing compound, finishing to lines and grades as per drawing complete as per specifications. - M30 (at 360Kg per cum coarse aggregate @ 0.69cum and fine aggregate @ 0.46cum) **(Page No. 175.tem No.22.6.1,PW,P & IWTD SR 2018-19)**

For CC Road		1	45.00	6.40	0.15	43.20		
4th C Cross						43.20	5354.02	231293.74
	Cum							
Basic Rate	4916.00							
Deduct Cement cost as per SR -18-19 Page No.V Sl.No.123	-1766.27	Note:- (360*490.63/100)=1766.27						
Add Cement cost as per Issue rate	1901.23	Note:- (360*264.06/50)=1901.23						
Sub Total	5050.96							
Area Weightage 6%	303.06							
Grand Total	5354.02							

5354.02

13 Vaccum de-watering with vaccum pump and suction mat and compaction with skin floater clubbed with floating disc including cost of generator, HOM of machinery, Screed Vibratory, Power Floater, blade and disc etc., with all lead and lift.**(Page No. 178.tem No.22.7,PW,P & IWTD SR 2018-19)**

For CC Road		1	45.00	6.40		288.00		
4th C Cross						288.00	72.08	20759.04
	Sqm							
Basic Rate	68.00							
Area Weightage 6%	4.08							
Grand Total	72.08							

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	M500-6. Providing and applying primer coat with bitumen emulsion on prepared surface of granular base including of road surface and spraying primer at the rate of 0.60 kg l sqm using mechanical means complete as per itions.MORTH Specification No. 502 **(Page No-161 Item no - 21.6 of KPWD SR 2018-19)**								
	sphalt Road								
	n Nagara								
	ross 1st Main Road to 2nd Main Road		2	85.00	1.20		204.00		
	Cross Gurujji Road from pipe line to 3rd Crs		2	206.00	1.20		494.40		
	shanth Nagara								
	th C cross		2	135.00	1.20		324.00		
							1022.40	**28.62**	**29261.09**
		Sqm							
	Issue Rate	27.00							
	Area Weightage 6%	1.62							
	Grand Total	**28.62**							
15	KSRRB M500-17. Providing and laying dense graded bituminous macadam using crushed aggregates of specified grading, premixed with VG30 grade bituminous binder and, transporting the hot mix to work site, laying to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH table 500-10 complete in all respects complete as per specifications.. MORTH Specification No. 507 - using 40/60 TPH capacity H.M.P. with Mechanical paver Gr-II (50 mm to 75 mm) with 4.5 % VG-30 Bitumen **(Page No-160 Item no - 21.17.6 of KPWD SR 2018-19)**								
	For Asphalt Road								
	Kalyan Nagara								
	3rd cross 1st Main Road to 2nd Main Road		2	85.00	1.20	0.05	10.20		
	7th Cross Gurujji Road from pipe line to 3rd Crs		2	206.00	1.20	0.05	24.72		
	Prashanth Nagara								
	15th C cross		1	135.00	2.00	0.05	13.50		
							48.42	**6597.44**	**319448.04**
		Cum							
	Issue Rate	6224.00							
	Area Weightage 6%	373.44							
	Grand Total	**6597.44**							
16	KSRRB 500-2. Cleaning the existing black topped surface with brooms, soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries complete as per specifications. MORTH specification clause 501 **(Page No-161 Item no - 21.2 of KPWD SR 2018-19).**								
	For Asphalt Road								
	Kalyan Nagara								
	3rd cross 1st Main Road to 2nd Main Road		1	85.00	4.20		357.00		
	7th Cross Gurujji Road from pipe line to 3rd Crs		1	206.00	5.50		1133.00		
	Prashanth Nagara								
	15th C cross		1	135.00	5.20		702.00		
							2192.00	**5.30**	**11617.60**
		Sqm							
	Basic Rate	5.00							
	Area Weightage 6%	0.30							
	Grand Total	**5.30**							
17	KSRRB 500-7. Providing and applying tack coat using 80/100 grade bitumen(VGIO) on the prepared black topped surfaces at 2.5 kg per 10sqm, heating bitumen in boiler fitted with spray set (excluding cleaning of road surface) including cost of all materials, labour, HOM of machineries complete as per specifications.MORTH **(Page No-161 Item no - 21.7 of KPWD SR 2018-19).**								
	For Asphalt Road								
	Kalyan Nagara								
	3rd cross 1st Main Road to 2nd Main Road		1	85.00	4.20		357.00		
	7th Cross Gurujji Road from pipe line to 3rd Crs		1	206.00	5.50		1133.00		
	Prashanth Nagara								
	15th C cross		1	135.00	5.20		702.00		
							2192.00	**12.72**	**27882.24**
		Sqm							
	Issue Rate	12.00							
	Area Weightage 6%	0.72							
	Grand Total	**12.72**							
18	KSRRB M500-19. Providing and laying bituminous concrete 40 mm thick with hot mix plant, using crushed aggregates of specified grading, premixed with bituminous binder and filler, transporting the hot mix to work site, laying with a paver finisher to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 500.9 complete in all respects complete as per specifications. Clause 507 of MORTH V Version as per IRC SP-53-2015,**do-Using 40-60 TPH Capacity HMP With Mechanical Paver Grading II (30-45mm) with 5.4% of Modified bituminous binder consisting of 4.97% of VG-30 bitumen (60/70 grade) and 0.43% of plastomeric thermoplastics (Waste Plastic) (P.No.171 & I.No.21.78.12, PWD 18-19)**								
	For Asphalt Road								
	Kalyan Nagara								
	3rd cross 1st Main Road to 2nd Main Road		1	85.00	4.50	0.03	11.48		
	7th Cross Gurujji Road from pipe line to 3rd Crs		1	206.00	5.50	0.03	33.99		
	1st Cross BHEL mini colony		1	99.00	4.00	0.03	11.88		

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ublic school opposite Road		1	86.00	4.20	0.03	10.70		
h Nagara								
oss		1	135.00	5.50	0.03	22.28		
	Cum					90.32	7753.90	700332.25
Issue Rate	7315.00							
Area Weightage 6%	438.90							
Grand Total	7753.90							

RB M100-1 Loading and Unloading of Stone Boulder / Stone aggregates /Sand/ Kanker / Moorum. KSRRB M100-1 : ng tipper at loading point, loading with front end loader,dumping, turning for return trip, excluding time for haulage and rn trip complete as per specifications. MORTH -100/ Chapter 1 (P.No.136 & I.No.17.1 PWD 18-19)

de Item No.1,8 &9						629.68		
	Cum					629.68	57.00	35891.76
Basic Rate	57.00							

KSRRB M100-4.1. Cost of Haulage Excluding Loading and Unloading MORTH -100/ Chapter 1 Case-I : Surface Road (P.No.136 & I.No.17.4 PWD 18-19)

Vide Item No.19						629.68		
	t.km					629.68	25.60	16119.81
Lead for earth 10 km=(10*1.28*2=25.60)	25.60							

Total Constrution cost	3842921.40
GST Charges 12%	461150.57
Tender Premium 5%	192146.07
Sub Total	4496218.04
Miscellaneous & Rounding Off	3781.96
Grand Total	4500000.00

Certificate:-

1) This work comes within BBMP limits.
2) Certified that Personaly Inspected the Work Spot
3) Certified that the estimate is prepared based on CSR of PWD Banglore Circle 2018-19
4) Estimate is prepared Making Use of essential item of work as per site Conditions in safest way of Execution in most economical way
5) This work is not included in any other program of work

Assistant Engineer
Ward No.13

Assistant Executive Engineer
Shetyhalli Sub - Division

Executive Engineer
Dasarahalli Zone

ADMINISTRATIVELY SANCTIONED FOR Rs. 45.00
(Rupees Forty Five lakhs only
Under the Head of Account P.3726
Registered as no EE(D.D.)/AS/14/2020-21 Subject to conditions contained in Enclosed Memo
No. EE/DD/AS/14/2020-21 Dt: 22/04/2020

JE/AE. Exe. Engg (DASARAHALLI) BBMP

Technically Sanctioned For Rs: 45,00,000/-
Rs. In Words Forty five lakhs only
Under P 3726
Job Code No. 013-20-000130
Registered as SE No. 32 /20-21 subject to conditions contained in Enclosed Memo No. SE/DZ/TS/32/20-21 Dt. 06/05/20

AE/JE TA SE(D)

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